

Daniele Fontanelli

List of Publications by Year in descending order

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Version: 2024-02-01

141
papers

2,223
citations

331670

21
h-index

315739

38
g-index

146
all docs

146
docs citations

146
times ranked

1628
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | On-Line Optimal Ranging Sensor Deployment for Robotic Exploration. IEEE Sensors Journal, 2022, 22, 5417-5426. | 4.7 | 11 |
| 2 | Efficient Prediction of Human Motion for Real-Time Robotics Applications With Physics-Inspired Neural Networks. IEEE Access, 2022, 10, 144-157. | 4.2 | 7 |
| 3 | Multi-agent navigation in human-shared environments: A safe and socially-aware approach. Robotics and Autonomous Systems, 2022, 149, 103979. | 5.1 | 6 |
| 4 | Indoor Localization Uncertainty Control Based on Wireless Ranging for Robots Path Planning. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11. | 4.7 | 10 |
| 5 | Information-Aware Lyapunov-Based MPC in a Feedback-Feedforward Control Strategy for Autonomous Robots. IEEE Robotics and Automation Letters, 2022, 7, 4765-4772. | 5.1 | 4 |
| 6 | A Tuned Whitening-Based Taylor-Kalman Filter for P Class Phasor Measurement Units. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-13. | 4.7 | 9 |
| 7 | Multiagent Persistent Monitoring via Time-Inverted Kuramoto Dynamics. , 2022, 6, 2798-2803. | | 4 |
| 8 | Perception for Autonomous Systems: A Measurement Perspective on Localization and Positioning. IEEE Instrumentation and Measurement Magazine, 2022, 25, 4-9. | 1.6 | 5 |
| 9 | On Local/Global Constructibility for Mobile Robots Using Bounded Range Measurements. , 2022, 6, 3038-3043. | | 2 |
| 10 | Activity Planning for Assistive Robots Using Chance-Constrained Stochastic Programming. IEEE Transactions on Industrial Informatics, 2021, 17, 3950-3961. | 11.3 | 2 |
| 11 | Robot-Based Indoor Positioning of UHF-RFID Tags: The SAR Method With Multiple Trajectories. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-15. | 4.7 | 59 |
| 12 | An Uncertainty-Driven and Observability-Based State Estimator for Nonholonomic Robots. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12. | 4.7 | 12 |
| 13 | Graph Connectivity Control of a Mobile Robot Network With Mixed Dynamic Multi-Tasks. IEEE Robotics and Automation Letters, 2021, 6, 1934-1941. | 5.1 | 5 |
| 14 | Ruling uncertainties in Range-only Robot Localisation. , 2021, , . | | 1 |
| 15 | An Uncertainty-driven Analysis for Delayed Mapping SLAM. , 2021, , . | | 4 |
| 16 | Vehicle Localisation using Asphalt Embedded Magnetometer Sensors. , 2021, , . | | 1 |
| 17 | Robot Motion Planning: can GPUs be a Game Changer?. , 2021, , . | | 1 |
| 18 | Robot Localisation Using UHF-RFID Tags: A Kalman Smoother Approach â€. Sensors, 2021, 21, 717. | 3.8 | 15 |

| # | ARTICLE | IF | CITATIONS |
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| 19 | Cramerâ€™Rao Lower Bound Attainment in Range-Only Positioning Using Geometry: The G-WLS. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-14. | 4.7 | 6 |
| 20 | UWB Indoor Global Localisation for Nonholonomic Robots with Unknown Offset Compensation. , 2021, , . | | 6 |
| 21 | Kalman Filtering with Harmonics Whitening for P Class Phasor Measurement Units. , 2021, , . | | 2 |
| 22 | Scale up to infinity: the UWB Indoor Global Positioning System. , 2021, , . | | 12 |
| 23 | Humanâ€™Robot Interaction Analysis for a Smart Walker for Elderly: The ACANTO Interactive Guidance System. International Journal of Social Robotics, 2020, 12, 479-492. | 4.6 | 29 |
| 24 | Ranging-Free UHF-RFID Robot Positioning Through Phase Measurements of Passive Tags. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 2408-2418. | 4.7 | 48 |
| 25 | A Comparative Analysis of Foraging Strategies for Swarm Robotics using ARGoS Simulator. , 2020, , . | | 1 |
| 26 | A Distribution System State Estimator Based on an Extended Kalman Filter Enhanced with a Prior Evaluation of Power Injections at Unmonitored Buses. Energies, 2020, 13, 6054. | 3.1 | 12 |
| 27 | A Positioning Filter based on Uncertainty and Observability Analyses for Nonholonomic Robots. , 2020, , . | | 6 |
| 28 | Majority Effect in Cooperative localisation of Mobile Agents using Ranging Measurements. , 2020, , . | | 0 |
| 29 | Robot Localisation using UHF-RFID Tags for Industrial IoT Applications. , 2020, , . | | 5 |
| 30 | Socially-Aware Multi-agent Velocity Obstacle Based Navigation for Nonholonomic Vehicles. , 2020, , . | | 2 |
| 31 | Optimal resource allocation for stochastic systems performance optimisation of control tasks undergoing stochastic execution times. International Journal of Control, 2020, , 1-12. | 1.9 | 3 |
| 32 | Socially-Aware Reactive Obstacle Avoidance Strategy Based on Limit Cycle. IEEE Robotics and Automation Letters, 2020, 5, 3251-3258. | 5.1 | 14 |
| 33 | An Iterative Dynamic Programming Approach to the Multipoint Markov-Dubins Problem. IEEE Robotics and Automation Letters, 2020, 5, 2483-2490. | 5.1 | 6 |
| 34 | Minimum Timeâ€™Minimum Jerk Optimal Traffic Management for AGVs. IEEE Robotics and Automation Letters, 2020, 5, 5307-5314. | 5.1 | 8 |
| 35 | Global Observability Analysis of a Nonholonomic Robot using Range Sensors. , 2020, , . | | 10 |
| 36 | Lloyd-based Approach for Robots Navigation in Human-shared environments. , 2020, , . | | 1 |

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| 37 | Combining Haptic and Bang-Bang Braking Actions for Passive Robotic Walker Path Following. IEEE Transactions on Haptics, 2019, 12, 542-553. | 2.7 | 11 |
| 38 | Cooperative UAVs Gas Monitoring using Distributed Consensus. , 2019, , . | | 11 |
| 39 | Uncertainty Analysis of Distribution System State Estimation based on Extended Kalman Filtering and Phasor Measurement Units. , 2019, , . | | 2 |
| 40 | Effective Landmark Placement for Robot Indoor Localization With Position Uncertainty Constraints. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 4443-4455. | 4.7 | 24 |
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| 42 | Coverage control and distributed consensus-based estimation for mobile sensing networks in complex environments. , 2019, , . | | 7 |
| 43 | Reactive Planning for Assistive Robots. IEEE Robotics and Automation Letters, 2018, 3, 1276-1283. | 5.1 | 35 |
| 44 | Simulating Passivity for Robotic Walkers via Authority-Sharing. IEEE Robotics and Automation Letters, 2018, 3, 1306-1313. | 5.1 | 15 |
| 45 | A Distributed Strategy for Target Tracking and Rendezvous Using UAVs Relying on Visual Information Only. Electronics (Switzerland), 2018, 7, 211. | 3.1 | 6 |
| 46 | A Software-based Low-Jitter Servo Clock for Inexpensive Phasor Measurement Units. , 2018, , . | | 9 |
| 47 | Towards a Predictive Behavioural Model for Service Robots in Shared Environments. , 2018, , . | | 5 |
| 48 | SAR-Based Indoor Localization of UHF-RFID Tags via Mobile Robot. , 2018, , . | | 49 |
| 49 | Bluetooth-Based Indoor Positioning Through ToF and RSSI Data Fusion. , 2018, , . | | 27 |
| 50 | Efficient Re-planning for Robotic Cars. , 2018, , . | | 9 |
| 51 | Ruling the Control Authority of a Service Robot Based on Information Precision. , 2018, , . | | 5 |
| 52 | On Soft Real-Time Implementation of LQG Controllers. , 2018, , . | | 1 |
| 53 | The PROSIT tool: Toward the optimal design of probabilistic soft real-time systems. Software - Practice and Experience, 2018, 48, 1940-1967. | 3.6 | 2 |
| 54 | Modelling of a Group of Social Agents Monitored by UAVs. Lecture Notes in Computer Science, 2018, , 40-58. | 1.3 | 1 |

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| 55 | First Responders Robotic Network for Disaster Management. Lecture Notes in Computer Science, 2018, , 350-373. | 1.3 | 3 |
| 56 | Indoor Localization of Mobile Robots Through QR Code Detection and Dead Reckoning Data Fusion. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2588-2599. | 5.8 | 103 |
| 57 | Semi-analytical minimum time solutions with velocity constraints for trajectory following of vehicles. Automatica, 2017, 86, 18-28. | 5.0 | 35 |
| 58 | A Markovian model for the computation time of real-time applications. , 2017, , . | | 8 |
| 59 | Path Following With Authority Sharing Between Humans and Passive Robotic Walkers Equipped With Low-Cost Actuators. IEEE Robotics and Automation Letters, 2017, 2, 2271-2278. | 5.1 | 15 |
| 60 | Probabilistic Real-Time Guarantees: There Is Life Beyond the i.i.d. Assumption (Outstanding Paper). , 2017, , . | | 6 |
| 61 | A nearly optimal landmark deployment for indoor localisation with limited sensing. , 2017, , . | | 14 |
| 62 | Path following for robotic rollators via simulated passivity. , 2017, , . | | 4 |
| 63 | Decorrelation-based Harmonic Distortion Reduction for Synchrophasor Measurements. , 2017, , . | | 3 |
| 64 | Assistive robotic walker parameter identification for estimation of human thrust without force sensors. , 2017, , . | | 0 |
| 65 | Walking Ahead: The Headed Social Force Model. PLoS ONE, 2017, 12, e0169734. | 2.5 | 91 |
| 66 | Harnessing steering singularities in passive path following for robotic walkers. , 2017, , . | | 8 |
| 67 | Semi-analytical minimum time solutions for a vehicle following clothoid-based trajectory subject to velocity constraints. , 2016, , . | | 14 |
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| 69 | Hybrid feedback path following for robotic walkers via bang-bang control actions. , 2016, , . | | 6 |
| 70 | Passive robotic walker path following with bang-bang hybrid control paradigm. , 2016, , . | | 12 |
| 71 | Optimal placement of passive sensors for robot localisation. , 2016, , . | | 13 |
| 72 | When Helbing meets Laumond: The Headed Social Force Model. , 2016, , . | | 12 |

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| 73 | Trajectory planning for car-like vehicles: A modular approach. , 2016, , . | | 14 |
| 74 | Impact of Acquisition Wideband Noise on Synchrophasor Measurements: A Design Perspective. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 2244-2253. | 4.7 | 34 |
| 75 | Performance of Phasor Measurement Units for power quality event detection in urban distribution grids. , 2016, , . | | 9 |
| 76 | Sensory stimulation for human guidance in robot walkers: A comparison between haptic and acoustic solutions. , 2016, , . | | 6 |
| 77 | Optimal placement of landmarks for indoor localization using sensors with a limited range. , 2016, , . | | 11 |
| 78 | Quasi time-optimal hybrid trajectory tracking of an n-dimensional saturated double integrator. , 2016, , . | | 1 |
| 79 | Path planning maximising human comfort for assistive robots. , 2016, , . | | 27 |
| 80 | Collaborative localization of robotic wheeled walkers using interlaced Extended Kalman Filters. , 2016, , . | | 6 |
| 81 | Enhancing Accuracy and Robustness of Frequency Transfer Using Synchronous Ethernet and Multiple Network Paths. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1926-1936. | 4.7 | 6 |
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| 87 | Optimal mean square control using the continuous stream model of computation. , 2015, , . | | 4 |
| 88 | A passive guidance system for a robotic walking assistant using brakes. , 2015, , . | | 16 |
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| 91 | On the Accuracy of Phasor Angle Measurements in Power Networks. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 1129-1139. | 4.7 | 33 |
| 92 | Dynamic Phasor and Frequency Measurements by an Improved Taylor Weighted Least Squares Algorithm. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 2165-2178. | 4.7 | 85 |
| 93 | Navigation assistance and guidance of older adults across complex public spaces: the DALi Approach. Intelligent Service Robotics, 2015, 8, 77-92. | 2.6 | 58 |
| 94 | Indoor Positioning of a Robotic Walking Assistant for Large Public Environments. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 2965-2976. | 4.7 | 56 |
| 95 | A cooperative monitoring technique using visually servoed drones. , 2015, , . | | 5 |
| 96 | A fast and low-cost vision-based line tracking measurement system for robotic vehicles. Acta IMEKO (2012), 2015, 4, 90. | 0.7 | 0 |
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| 101 | A Frequency-Domain Algorithm for Dynamic Synchrophasor and Frequency Estimation. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 2330-2340. | 4.7 | 105 |
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| 105 | Behavioural templates improve robot motion planning with social force model in human environments. , 2013, , . | | 11 |
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| 109 | Design and performance analysis of an indoor position tracking technique for smart rollators. , 2013, , . | | 11 |
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| 119 | Deterministic and Stochastic QoS Provision for Real-Time Control Systems. , 2011, , . | | 11 |
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| 124 | Design of Embedded Controllers Based on Anytime Computing. IEEE Transactions on Industrial Informatics, 2010, 6, 492-502. | 11.3 | 21 |
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| 135 | Optimal Paths in a Constrained Image Plane for Purely Image-Based Parking. , 2008, , . | | 11 |
| 136 | Robust Almost Sure Stability for Uncertain Stochastically Scheduled Anytime Controllers. , 2008, , . | | 1 |
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| 139 | Almost sure stability of anytime controllers via stochastic scheduling. , 2007, , . | | 14 |
| 140 | A Fast RANSAC-Based Registration Algorithm for Accurate Localization in Unknown Environments using LIDAR Measurements. , 2007, , . | | 35 |
| 141 | ADAPTIVE NONLINEAR CONTROL OF DYNAMIC MOBILE ROBOTS WITH PARAMETER UNCERTAINTIES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 566-573. | 0.4 | 0 |